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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,121	03/08/2001	Daniel S. Rice	016747014810	5592

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EXAMINER

COLEMAN, ERIC

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 02/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/802,121

Applicant(s)

RICE ET AL.

Examiner

Eric Coleman

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The Cross Reference to Related applications section of the specification should be updated as appropriate.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luick (patent No 5,890,009).

3. Luick taught the invention substantially as claimed including a data processing ("DP") system comprising:

a) Loading a first source field from a source register (e.g., see figs. 2,3,4 and col. 6, line 10-col. 7, line 16);

b) Loading a second source field from a source register (e.g., see col. 7, line 60-col. 8, line 10);

c) Manipulating the first source field (RA) to produce a first result and second source (RB) field to produce a second result (e.g., see figs. 2,3,4, and col. 7, line 60-col. 8, line 18 and col. 13, line 44-col. 14, line 22);

d) Storing the first result in a second result field to a destination field (the result of processing data RA stored in destination field RT)(e.g., see col. 8, lines 11-17 and col. 13, line 59-col. 14, line10); and

e) Storing the second result in a first result field of the destination field, wherein at least three of the preceding steps are associated with a single issue (the result of processing data RB stored in destination field RT) (e.g., see col. 13, line 24-col. 14, line 22) (the processing in the VLIW system was taught as part of the same issue).

4. As to the limitation (claim 14) of the second register field being from the same source register as the first register field Luick taught the second register field “could” provide for the operation two source registers (e.g., see col. 7, lines 60-67). Luick did not specifically detail that the loading of the second source field was from the same source register. However, since the source registers comprised eight source data fields not allowing the access to two fields of the same register would have required the system to always use two registers when two operands were used. It would have been obvious to one of ordinary skill to access two fields of the same register when providing the same operation such as ADDI on both input fields. This would simplify the access to the data. Without allowing for access to two fields of the same register when the data was in the same register the system would have to copy the data to another register to perform the simultaneous ADDI operations.

5. As per claim 15, Luick taught the result field was eight bits wide (e.g., see col. 8, lines 18-27 and col. 13, lines 33-66).

6. As per claim 16, the first result stored in the second result field is different from the first source field (the result of processing of RA source field using for example the ADDI instruction that adds the source register field with the immediate field of the parcel and then is stored in the destination field (e.g., see col. 7, lines 17-52)

7. As per claim 17, the second result stored in the first result field is different from the second source field the result of processing of RB source field using for example the ADDI instruction that adds the source register field with the immediate field of the parcel and then is stored in the destination field (e.g., see col. 7, lines 17-52 and col. 7, line 60-col. 8, line 10).

8. As per claim 18, the claim uses the terminology "group consisting of" where to meet the limitation only one of the listed features is required to meet the limitations of the claim. Here, Luick for example taught extension of the OP CODE (e.g., see col. 12, lines 25-44). Therefore the Luick system provided for extension of data in locations where the data did not fill every bit of the location. Clearly one of ordinary skill would have been motivated to also extend the data in the data registers to ensure that the data in the register fields do not still contain any "garbage data" from data that was previously stored in the location.

9. As per claim 19, Luick taught the storing and manipulating steps are part of a same instruction issue in a VLIW system (e.g., see col. 7, line 12-col. 8, line 10)

Allowable Subject Matter

10. Claims 1-13 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Corcoran (patent No. 5,446,865) disclosed a processor adapted for sharing memory with more than one type of processor (e.g., see abstract).

Sawada (patent No. 4,580, 238) disclosed an arithmetic operating system where the operands are byte addressed (e.g., see abstract and col. 2 lines 1-col. 2, line 67).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (703) 305-9674. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (703) 305-9712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC

February 11, 2004


ERIC COLEMAN
PRIMARY EXAMINER